

REMARKS

This is a full and timely response to the non-final Office action mailed April 2, 2004. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Claims 1-25 are now pending in this application, with Claims 1, 13, and 25 being the independent claims. Claims 12 and 25 have been cosmetically amended, and Claims 26-30 have been canceled herein without prejudice or disclaimer in response to the finality of a previously imposed restriction requirement. No new matter is believed to have been added.

Claim Objections

Claim 12 was objected to due to a minor informality. Namely, the word "coupled" was inadvertently included twice in the recited claim. In response, Applicant has cosmetically amended Claim 12 to remove the first instance of the word "coupled" in the claim.

In view of the above, Applicant respectfully requests withdrawal of the objection to Claim 12.

Rejections Under 35 U.S.C. § 103

Claims 1-12 and 25 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over U.S. Patent Nos. 5,412,531 (Clapp, III), 6,130,813 (Kates et al.), and 5,452,700 (Matsuura); Claims 13-17 and 24 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Clapp, III and Matsuura; and, Claims 18-23 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Clapp, III, Matsuura, and Kates et al.. These rejections are respectfully traversed.

In the Office action various recitations in at least independent Claims 1, 13, and 25 are ignored as allegedly being directed to "process limitations in product claims." A specific case (i.e., In re Stephens 145 USPQ 656 (CCPA 1965)) from the Court of Customs and Patent Appeals (CCPA) is cited in support of the proposition that when process limitations are recited in product claims that are not otherwise structurally

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patentable, the process limitations cannot impart patentability to the product. However, as will now be explained, the Office action wholly misinterprets and misapplies the cited case, and in addition fully ignores other mandates of claim construction that must be exercised during the examination process.

As regards In re Stephens, it is noted that the holding in this case relates to product-by-process claims. More specifically, the Applicant in that case wanted the USPTO to impart patentability to structure that was recited in a claim as being made in accordance with specified process steps, which were also recited in the claim. This is not the case in the instant application. None of the claims in the instant application recite a process for making a claimed structure. Rather, the claims recite, in certain instances, the function carried out by claimed structure, which, as will now be explained, is both wholly proper and cannot be ignored.

As is clearly delineated in Federal Circuit (and its predecessor court) case law, there is nothing inherently wrong with defining some part of an invention in functional terms; indeed, functional language does not, in and of itself, render a claim improper. In re Swinehart, 439 F.2d 210, 169 USPQ 226 (CCPA 1971). Moreover, as is clearly stated in the M.P.E.P., “[a] functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used.” See M.P.E.P. § 2173.05(g) (emphasis added).

In view of the foregoing, the functional limitations recited in at least the independent claims must be evaluated and considered, and cannot be wholly ignored, as was done in the Office action. When each of the independent claims is evaluated as a whole, Applicant submits that none of the cited references, either alone or in combination, disclose or suggest each feature recited therein. Specifically, Applicant submits that none of Clapp, III, Matsuura, or Kates et al., either alone or in combination, disclose or suggest at least:

(1) “a controller circuit operable to (i) selectively open and close the first controllable switch and the second controllable switch in response to a command signal and (ii) selectively open and close the second controllable switch based on

a magnitude of current flow through the solenoid," as recited in independent Claim 1;

(2) "a controller circuit having at least a first input coupled to receive a command signal and operable to (i) selectively open and close the first controllable switch and the second controllable switch in response to the command signal and (ii) selectively open and close the second controllable switch based on a magnitude of current flowing through the solenoid," as recited in independent Claim 13; or

(3) "a comparator circuit having at least a first input terminal coupled to a reference voltage, a second input terminal coupled to receive a voltage signal representative of a current flowing through the solenoid, and a third input terminal coupled to receive the command signal, the comparator operable to supply a switch control signal based on the signals on the first, second, and third input terminals, as recited in independent Claim 25.

In view of the foregoing, Applicant respectfully requests reconsideration and withdrawal of the § 103 rejections.

#### Conclusion

Based on the above, independent Claims 1, 13, and 25 are patentable over the citations of record. The dependent claims are also submitted to be patentable for the reasons given above with respect to the independent claims and because each recite features which are patentable in its own right. Individual consideration of the dependent claims is respectfully solicited.

The other art of record is also not understood to disclose or suggest the inventive concept of the present invention as defined by the claims.

Hence, Applicant submits that the present application is in condition for allowance. Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

Jun. 22. 2004 11:13AM INGRASSIA FISHER & LORENZ PC  
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If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

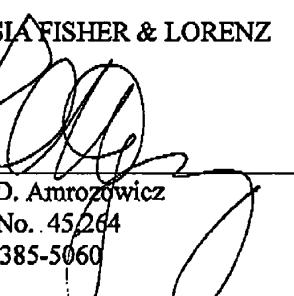
If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

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